

| L Number | Hits | Search Text | DB | Time stamp |
|----------|--------|---|---|------------------|
| - | 9069 | (345/87-104).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 18:10 |
| - | 5065 | (349/33-56).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 09:58 |
| - | 3356 | (349/167-186).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 09:59 |
| - | 16417 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:14 |
| - | 16302 | perpendicular near3 substrate | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:37 |
| - | 663 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) and (perpendicular near3 substrate) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:05 |
| - | 595 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) and (perpendicular near3 substrate)) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:05 |
| - | 2091 | (perpendicular near3 substrate) with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:42 |
| - | 232 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) and ((perpendicular near3 substrate) with electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:05 |
| - | 197 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) and ((perpendicular near3 substrate) with electrode)) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:15 |
| - | 200187 | electrode with substrate | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:20 |
| - | 100794 | electrode near3 substrate | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:20 |
| - | 1248 | (perpendicular near3 substrate) same (electrode near3 substrate) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:33 |
| - | 13443 | ((first or second) adj electrode) with substrate | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:21 |
| - | 229 | (perpendicular near3 substrate) same (((first or second) adj electrode) with substrate) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:21 |
| - | 187 | ((perpendicular near3 substrate) same (((first or second) adj electrode) with substrate)) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:33 |

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|---|-------|---|---|------------------|
| - | 273 | ((perpendicular near3 substrate) same (electrode near3 substrate)).ab. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:33 |
| - | 259 | ((((perpendicular near3 substrate) same (electrode near3 substrate)).ab.) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 10:33 |
| - | 1 | ("6646710").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:07 |
| - | 9 | ("4852978" "5301045" "5325218" "5359439" "6130732" "6133971" "6245256" "6278505" "6317189").PN. | USPAT | 2003/12/08 11:07 |
| - | 0 | 6646710.URPN. | USPAT | 2003/12/08 11:10 |
| - | 192 | (349/151).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:35 |
| - | 176 | ((349/151).CCLS.) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:37 |
| - | 1038 | (349/33).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:52 |
| - | 16302 | perpendicular near3 substrate | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:37 |
| - | 29 | ((349/33).CCLS.) and (perpendicular near3 substrate) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:50 |
| - | 29 | ((((349/33).CCLS.) and (perpendicular near3 substrate)) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:52 |
| - | 278 | (349/35).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:49 |
| - | 7 | ((349/35).CCLS.) and (perpendicular near3 substrate) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:50 |
| - | 100 | (349/178).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:52 |
| - | 99 | ((349/178).CCLS.) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 11:52 |
| - | 1 | ("5841499").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 12:59 |
| - | 9 | ("3674342" "3736047" "3774989" "3807832" "3834794" "3854751" "4116544" "4345249" "4844569").PN. | USPAT | 2003/12/08 12:59 |
| - | 20 | 5841499.URPN. | USPAT | 2003/12/08 13:13 |

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|---|--------|--|---|------------------|
| - | 1 | ("5841498").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 13:15 |
| - | 2 | ("3774989" "4844569").PN. | USPAT | 2003/12/08 13:14 |
| - | 9 | 5841498.URPN. | USPAT | 2003/12/08 13:14 |
| - | 1 | ("5576867").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 13:15 |
| - | 9 | ("3674342" "3736047" "3807831" "3834794" "3854751" "4039252" "4116544" "4345249" "4844569").PN. | USPAT | 2003/12/08 13:15 |
| - | 25 | 5576867.URPN. | USPAT | 2003/12/08 13:17 |
| - | 16417 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 13:46 |
| - | 82091 | IPS or (((in adj plane) or inplane) adj switch\$3) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 14:08 |
| - | 355 | ((((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) and (IPS or (((in adj plane) or inplane) adj switch\$3))) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 14:08 |
| - | 175 | ((((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) and (IPS or (((in adj plane) or inplane) adj switch\$3))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 14:08 |
| - | 5393 | IPS! or (((in adj plane) or inplane) adj switch\$3) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:22 |
| - | 266 | ((((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) and (IPS! or (((in adj plane) or inplane) adj switch\$3))) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 14:08 |
| - | 102 | ((((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) and (IPS! or (((in adj plane) or inplane) adj switch\$3))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:18 |
| - | 467598 | end-to-end or (end near2 end) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:30 |
| - | 4833 | (349/139-152).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:16 |
| - | 160 | (end-to-end or (end near2 end)) and ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:16 |
| - | 107 | ((end-to-end or (end near2 end)) and ((349/139-152).CCLS.) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:23 |
| - | 5393 | IPS! or (((in adj plane) or inplane) adj switch\$3) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:17 |
| - | 348 | ((349/139-152).CCLS.) and (IPS! or (((in adj plane) or inplane) adj switch\$3)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:22 |

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|---|--------|--|---|------------------|
| - | 161 | (((349/139-152).CCLS.) and (IPS! or (((in adj plane) or inplane) adj switch\$3))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:33 |
| - | 263 | IPS! or (((in adj plane) or inplane) adj switch\$3) | JPO | 2003/12/08 15:30 |
| - | 24389 | end-to-end or (end near2 end) | JPO | 2003/12/08 15:32 |
| - | 797 | (end-to-end or (end near2 end)) with electrode | JPO | 2003/12/08 15:33 |
| - | 0 | (IPS! or (((in adj plane) or inplane) adj switch\$3)) and ((end-to-end or (end near2 end)) with electrode) | JPO | 2003/12/08 15:31 |
| - | 0 | (IPS! or (((in adj plane) or inplane) adj switch\$3)) and ((IPS! or (((in adj plane) or inplane) adj switch\$3)) and ((end-to-end or (end near2 end)) with electrode)) | JPO | 2003/12/08 15:31 |
| - | 0 | (IPS! or (((in adj plane) or inplane) adj switch\$3)) and (end-to-end or (end near2 end)) | JPO | 2003/12/08 15:31 |
| - | 797 | (end-to-end or (end near2 end)) and ((end-to-end or (end near2 end)) with electrode) | JPO | 2003/12/08 15:32 |
| - | 101440 | lcd or (liquid adj crystal) | JPO | 2003/12/08 15:33 |
| - | 24 | ((end-to-end or (end near2 end)) with electrode) and (lcd or (liquid adj crystal)) | JPO | 2003/12/08 15:33 |
| - | 21 | (((end-to-end or (end near2 end)) with electrode) and (lcd or (liquid adj crystal))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:17 |
| - | 2 | jp-07281201-\$.did. | JPO; DERWENT | 2003/12/08 15:56 |
| - | 1 | 1996-004392.NRAN. | DERWENT | 2003/12/08 15:55 |
| - | 1 | ("5313562").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/08 15:56 |
| - | 10 | ("3807831" "4291307" "4496220" "4889412" "4948232" "5084778" "5103329" "5136407" "5182664" "5229873").PN. | USPAT | 2003/12/08 15:56 |
| - | 10 | 5313562.URPN. | USPAT | 2003/12/08 15:58 |
| - | 1 | ("5995186").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 10:52 |
| - | 6 | ("4726659" "5600464" "5686019" "5742369" "5745207" "5852485").PN. | USPAT | 2003/12/10 10:52 |
| - | 2095 | (perpendicular near3 substrate) with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:19 |
| - | 5402 | IPS! or (((in adj plane) or inplane) adj switch\$3) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:17 |
| - | 127 | ((perpendicular near3 substrate) with electrode) and (IPS! or (((in adj plane) or inplane) adj switch\$3)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:17 |
| - | 44 | (((perpendicular near3 substrate) with electrode) and (IPS! or (((in adj plane) or inplane) adj switch\$3))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:20 |
| - | 3736 | (perpendicular near3 substrate) with (molecule or axis or axe) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:19 |
| - | 3736 | (perpendicular near3 substrate) with (molecule or axis! or axe) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:20 |

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| - | 157 | ((perpendicular near3 substrate) with (molecule or axis! or axe)) and (IPS! or (((in adj plane) or inplane) adj switch\$3)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:20 |
| - | 58 | (((perpendicular near3 substrate) with (molecule or axis! or axe)) and (IPS! or (((in adj plane) or inplane) adj switch\$3))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 12:20 |
| - | 1 | ("5313562").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 14:05 |
| - | 1 | ("5786876").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2003/12/10 14:05 |
| - | 896453 | electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:42 |
| - | 245050 | (liquid adj crystal) or (liquid\$1crystal) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:06 |
| - | 1012033 | pixel or cell | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:43 |
| - | 118696 | (pixel or cell) with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 15:18 |
| - | 7560 | corner with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 15:19 |
| - | 1919 | ((pixel or cell) with electrode) and (corner with electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:48 |
| - | 23982 | ((liquid adj crystal) or (liquid\$1crystal)) same (((pixel or cell) with electrode) or (corner with electrode)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:48 |
| - | 740 | (((pixel or cell) with electrode) and (corner with electrode)) and (((liquid adj crystal) or (liquid\$1crystal)) same (((pixel or cell) with electrode) or (corner with electrode))) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 14:48 |
| - | 765 | ((pixel or cell) with electrode) with (corner with electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 15:19 |
| - | 222 | ((liquid adj crystal) or (liquid\$1crystal)) same (((pixel or cell) with electrode) with (corner with electrode)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 15:19 |
| - | 144 | (((liquid adj crystal) or (liquid\$1crystal)) same (((pixel or cell) with electrode) with (corner with electrode))) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/04 15:20 |
| - | 1 | ("5572344").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:02 |

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| - | 6 | ("4728175" "4818078" "4824218" "4906072" "5204764" "5490002").PN. | USPAT | 2004/11/05 13:02 |
| - | 52 | 4728175.URPN. | USPAT | 2004/11/05 13:05 |
| - | 0 | 5572344.URPN. | USPAT | 2004/11/05 13:05 |
| - | 5341 | (349/139-152).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:15 |
| - | 1494 | gap\$3 and ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:18 |
| - | 1492 | gap and ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:22 |
| - | 1351 | (349/142-143).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:18 |
| - | 332 | gap\$3 and ((349/142-143).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:18 |
| - | 232 | (gap\$3 and ((349/142-143).CCLS.)) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:24 |
| - | 49516 | gap\$3 with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:14 |
| - | 850 | (gap\$3 with electrode) and ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:27 |
| - | 9557 | discharg\$3 near2 gap\$3 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:06 |
| - | 2 | (discharg\$3 near2 gap\$3) and ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:23 |
| - | 2 | ((discharg\$3 near2 gap\$3) and ((349/139-152).CCLS.)) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:27 |
| - | 203 | (gap\$3 with electrode) and ((349/142-143).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:27 |
| - | 146 | ((gap\$3 with electrode) and ((349/142-143).CCLS.)) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:44 |
| - | 32235 | taper\$3 and electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:43 |
| - | 249 | ((349/139-152).CCLS.) and (taper\$3 and electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:44 |

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| - | 7506 | taper\$3 with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:43 |
| - | 126 | ((349/139-152).CCLS.) and (taper\$3 with electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:44 |
| - | 69 | ((((349/139-152).CCLS.) and (taper\$3 with electrode))) and @ad<20001110 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 13:44 |
| - | 9557 | discharg\$3 near2 gap\$3 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:06 |
| - | 245050 | (liquid adj crystal) or (liquid\$1crystal) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:07 |
| - | 35 | (discharg\$3 near2 gap\$3) same ((liquid adj crystal) or (liquid\$1crystal)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:07 |
| - | 31 | ((discharg\$3 near2 gap\$3) same ((liquid adj crystal) or (liquid\$1crystal))) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:13 |
| - | 74794 | parallel with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:13 |
| - | 49516 | gap\$3 with electrode | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:14 |
| - | 3323 | (parallel with electrode) with (gap\$3 with electrode) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:14 |
| - | 17939 | ((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:14 |
| - | 5341 | (349/139-152).CCLS. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:15 |
| - | 21881 | ((((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) or ((349/139-152).CCLS.) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:15 |
| - | 204 | ((parallel with electrode) with (gap\$3 with electrode)) and (((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) or ((349/139-152).CCLS.)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:15 |
| - | 175 | ((parallel with electrode) with (gap\$3 with electrode)) and (((345/87-104).CCLS.) or ((349/33-56).CCLS.) or ((349/167-186).CCLS.)) or ((349/139-152).CCLS.)) and @ad<20011108 | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 15:16 |
| - | 1 | ("6642984").PN. | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/11/05 18:10 |